Abstract

Driven by the influx of data from genome sequencing projects, systematic efforts are now underway to construct defined sets of cloned genes for high throughput expression and purification of recombinant proteins. To facilitate the subsequent study of protein function, the present invention provides protein microarrays that are compatible with the demand for extremely low sample volume and the rapid, simultaneous processing of thousands of proteins, and methods of assaying these arrays. The proteins are covalently or non-covalently attached to the surface of a solid support and retain their ability to interact specifically with other proteins, polynucleotides, other biological macromolecules, or small molecules.